Detailed Action

Status of claims. Claims 1-31, 35-52, 54 and 55 are pending. Claim 12 has been amended and claim 53 has been cancelled by applicants' amendment filed on 12-28-2009. Claims 1-11, 30, 31, 35-38 and 47-52 were previously withdrawn from consideration as being directed to non-elected inventions pursuant to 37 CFR1.14(b), there being no allowable generic or linking claim.

The examiner contacted Applicant's representative on March 22, 2010 to discuss cancellation of claims 1-11, 30, 31, 35-38 and 47-52 filed on 12-28-2009 to set forth the claims in condition for allowance.

Authorization for the Examiner's amendment was given in a telephone interview with Roy Roberts, on March 29, 2010. With respect to the proposed claims, an Examiner's amendment to the records appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

In the claims,

1) Claims 1-11, 30, 31, 35-38 and 47-52 have been cancelled.

Reasons for allowance

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or suggest of:

An isolated nucleotide sequence encoding a fusion protein comprising SEQ ID NO: 1 wherein the fusion protein:

 retains a cytosine deaminase activity as compared to a fusion protein comprising the amino acid sequence as depicted in SEQ ID NO: 1 but wherein the Ser residue in position 183 is Application/Control Number: 10/565,230

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substituted with an Arg residue; and

- has neither uracil phosphoribosyltransferase nor thymidine kinase activity.

Rejections/Objections withdrawn in response to Applicants' arguments or amendments:

Claim Rejections - 35 USC § 103(a)

In view of amendment of claim 12, rejection of claims 12-17, 20, 22-29, 39-46 and 54-55 under 35 U.S.C. 103(a) as being unpatentable over Erbs et al (WO99/54481, Date of Publication Oct. 28, 1999; see SCORE Search Results Details for Application 10565230 and Search Result 20080502_113223_us-10-565-230-1.p2n.rge. Result: No.1) in view of Kern et al (Gene, 1990, pp. 149-157, see SCORE Search Results Details for Application 10565230 and Search Result us-10-565-230-2.p2n.rge. Result No. 4) has been withdrawn.

In view of amendment of claim 12, rejection of claim 21 under 35 U.S.C. 103(a) as being unpatentable over Erbs et al (WO99/54481, Date of Publication Oct. 28, 1999; see SCORE Search Results Details for Application 10565230 and Search Result 20080502_113223_us-10-565-230-1.p2n.rge. Result: No.1) in view of Kern et al.(Gene, 1990, pp. 149-157, see SCORE Search Results Details for Application 10565230 and Search Result us-10-565-230-2.p2n.rge. Result No. 4) as applied to claim 12-17, 20, 22-29, 39-46 and 54-55 above, and further in view of Faure et al., has been withdrawn.

In view of amendment of claim 12, rejection of claims 18 and 19 under 35 U.S.C. 103(a) as being unpatentable over Erbs et al (WO99/54481, Date of Publication Oct. 28, 1999; see

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SCORE Search Results Details for Application 10565230 and Search Result

20080502_113223_us-10-565-230-1.p2n.rge. Result: No.1), in view of Kern et al.(Gene, 1990, pp. 149-157, see SCORE Search Results Details for Application 10565230 and Search Result us-10-565-230-2.p2n.rge. Result No. 4) as applied to claim 12-17, 20, 22-29, 39-46 and 54-55 above and further in view of Sutter et al., (FEBS Letters, 1995, pp 9-12) and Carroll (Vaccine 1997, pp. 387-394) has been withdrawn.

Conclusion

Claims 12-29, 39-46, 54 and 55 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Leavitt whose telephone number is 571-272-1085. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach, Ph.D can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633; Central Fax No. (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maria Leavitt/

Maria Leavitt Primary Examiner, Art Unit 1633